

financed by the Imperial Council of Agricultural Research.

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Poona,
April 23, 1945.

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THE MOTH *TARAGAMA SIVA* LEFROY, AS A PEST OF GUAVA TREE (*PSIDIUM GUAVA*)

THE caterpillar of *Taragama siva* Lef. (Lasiocampidæ, Lepidoptera) is recorded as a common pest of babul tree (*Acacia arabica*). Lefroy (1909) reports it also to be a pest of rose (*Rosa* sp.) and ber (*Zizyphus jujuba*). The writer finds it to be a pest of the guava tree (*Psidium guava*) at Calcutta.

A small number of caterpillars of this species were noted by the writer at the beginning of July 1944 on a young guava tree of about 9 feet in height. At the end of July 1944 the pests disappeared. In January 1945 the larvæ appeared again on the same tree and persisted till the end of February; as the branches of the tree later were cut down, subsequent history could not be traced. They were leaf-eaters and caused defoliation.

The maximum length of the larvæ was found to be 8.4 cm. The cocoons resembled the colour of the bark of the tree and were usually found in the hollows of the stems or

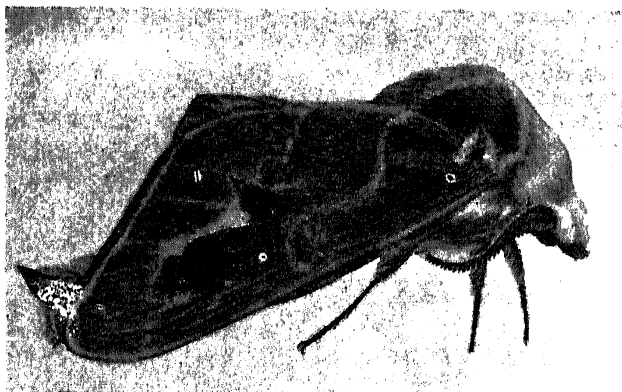


FIG. 1.—The moth *Taragama siva* Lefroy.

near the axils of the branches. The cocoons were tough like packing paper, and were of 4.6 to 5.0 cm. in length. The duration of the pupal period varied from 12 to 20 days.

It is interesting to mention that by the side of the guava tree there were several rose plants, which are said to be infected.

It is also worth noticing that the petal infected the same tree twice consecutively, once in July (summer) and later in January (winter). But the writer did not find the pest on other guava trees of different gardens. It will

be interesting to know whether *Taragama siva* Lef. occurs as a pest of guava trees of other localities, and this will determine the question whether its infection is sporadic or not.

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A NOTE ON THE PREDATORY HABIT OF *TRIBOLIUM* BEETLES

TRIBOLIUM beetles are observed attacking different cereals, flour and, in general, all stored food products. It is almost a terrible pest attacking the food which is meant for human consumption, and, often the damage is even more serious than that caused by the weevils and other lepidopterus pests. During the course of breeding *Corcyra cephalonica* St. for the mass production of *Trichogramma minutum* at Walchandnagar, it was noticed that the eggs of the moth when inoculated in the culture, did not hatch properly and thus interfered with the multiplication of the moths.

Since these beetles are often found in large numbers in broken *Jowar* which is kept in cages for breeding the moths, their presence is usually ignored. However, their association under the circumstances when hatching was much reduced, created much suspicion and observations under controlled conditions were made. Critical observations on their activities have revealed that these minute beetles are a very serious problem in the culture of *Corcyra cephalonica* and the following observations are recorded in this connection.

Eggs of *Corcyra cephalonica* were introduced in jars in which broken *Jowar* was kept as food. In each of the three experimental jars beetles were also introduced. Every day fresh eggs were counted, mounted on cards and introduced into the jars. Observations were made after 24, 48 and 72 hours when the eggs in the jars were counted. In another jar broken *Jowar* free from *Tribolium* beetles was kept and a definite number of eggs were introduced as a control. The beetles in the jars fed voraciously on the eggs so much so, that only a negligible percentage of eggs were allowed to hatch. During the course of 11 days when the experiments were conducted (Table I) 4,050 eggs were introduced out of which 3,779 eggs, i.e., 93.4 per cent., were eaten up by 84 beetles in the first 24 hours and ultimately only 105 eggs, i.e., 2.4 per cent., were left for hatching. Therefore, enormous damage is caused to eggs which are introduced for the culture in the *Corcyra* breeding cages infested with *Tribolium* beetles. In the